
Five most significant publications, doctoral thesis and book chapters

- 2011** **J. Kämpf**, chapters' author in *Computer Modelling for Sustainable Urban Design: Physical Principles, Methods and Applications*. Edited by D. Robinson, published by Earthscan (Taylor & Francis Group). ISBN: 9781844076796, <http://dx.doi.org/10.4324/9781849775403>.
- 2009** **J. Kämpf**, *On the Modelling and Optimisation of Urban Energy Fluxes*, PhD thesis, Solar Energy and Building Physics Laboratory, EPFL, n°4548, 2009, <http://dx.doi.org/10.5075/epfl-thesis-4548>.
- 2010** **J. Kämpf**, M. Montavon, J. Bunyesc, R. Bolliger, and D. Robinson. *Optimisation of buildings' solar irradiation availability*. *Solar Energy*, 84(4):596-603, 2010, <http://dx.doi.org/10.1016/j.solener.2009.07.013>.
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- J. Kämpf**, M. Wetter, and D. Robinson. *A comparison of global optimisation algorithms with standard benchmark functions and real-world applications using EnergyPlus*. *Journal of Building Performance Simulation*, 3(2):103-120, 2010, <http://dx.doi.org/10.1080/19401490903494597>.
- 2009** **J. Kämpf** and D. Robinson. *A hybrid CMA-ES and HDE optimisation algorithm with application to solar energy potential*. *Applied Soft Computing*, 9(2):738-745, 2009. <http://dx.doi.org/10.1016/j.asoc.2008.09.009>,
- 2007** **J. Kämpf** and D. Robinson. *A simplified thermal model to support analysis of urban resource flows*. *Energy & Buildings*, 39(4):445-453, 2007, <http://dx.doi.org/10.1016/j.enbuild.2006.09.002>.

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- 2019** Y. Wu, **J. Kämpf** and J. -L. Scartezzini, *Daylighting simulation for external Venetian blinds based on HDR sky luminance monitoring with matrix algebraic approach*, in: Energy Procedia, 158:2677-2682, 2019. <http://dx.doi.org/10.1016/j.egypro.2019.02.021>.
- Y. Wu, T. Wang, E. S. Lee, **J. Kämpf**, J.-L. Scartezzini, *Split-pane electrochromic window control based on an embedded photometric device with real-time daylighting computing*, Building and Environment, Volume 161, 2019, 106229, ISSN 0360-1323, <https://doi.org/10.1016/j.buildenv.2019.106229>.
- Y. Wu, **J. Kämpf**, J.-L. Scartezzini, *Automated 'Eye-sight' Venetian blinds based on an embedded photometric device with real-time daylighting computing*, Applied Energy, Volume 252, 2019, 113317, ISSN 0306-2619, <https://doi.org/10.1016/j.apenergy.2019.113317>.
- N. Mohajeri, A. Gudmundsson, T. Kunckler, G. Upadhyay, D. Assouline, **J. Kämpf**, J.L. Scartezzini, *A solar-based sustainable urban design: The effects of city-scale street-canyon geometry on solar access in Geneva, Switzerland*, Applied Energy, Volume 240, 2019, Pages 173-190, ISSN 0306-2619, <https://doi.org/10.1016/j.apenergy.2019.02.014>.
- 2018** J. R. Vázquez-Canteli, S. Ulyanin, **J. Kämpf**, Z. Nagy, *Fusing TensorFlow with building energy simulation for intelligent energy management in smart cities*, Sustainable Cities and Society, Volume 45, 2019, Pages 243-257, ISSN 2210-6707, <https://doi.org/10.1016/j.scs.2018.11.021>.
- C. Chatzipoulka, R. Compagnon, **J. Kämpf**, M. Nikolopoulou, *Sky view factor as predictor of solar availability on building façades*, Solar Energy, Volume 170, 2018, Pages 1026-1038, ISSN 0038-092X, <https://doi.org/10.1016/j.solener.2018.06.028>.
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- S. Coccolo, **J. Kämpf**, D. Mauree, J.-L. Scartezzini, *Cooling potential of greening in the urban environment, a step further towards practice*, In Sustainable Cities and Society, Volume 38, 2018, Pages 543-559, ISSN 2210-6707, <https://doi.org/10.1016/j.scs.2018.01.019>.
- A. Figueiredo, **J. Kämpf**, R. Vicente, R. Oliveira, T. Silva, *Comparison between monitored and simulated data using evolutionary algorithms: Reducing the performance gap in dynamic building simulation*, In Journal of Building Engineering, Volume 17, May 2018, Pages 96-106, ISSN 2352-7102, <https://doi.org/10.1016/j.jobbe.2018.02.003>.
- 2017** C. Miller, D. Thomas, **J. Kämpf**, A. Schlueter, *Urban and building multiscale co-simulation: case study implementations on two university campuses*, In Journal of Building Performance Simulation, 2017, Pages 1-13, <https://doi.org/10.1080/19401493.2017.1354070>.
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- V. M. Nik, S. Coccolo, **J. Kämpf**, J.-L. Scartezzini, *Investigating the importance of future climate typology on estimating the energy performance of buildings in the EPFL campus*, In Energy Procedia, Volume 122, 2017, Pages 1087-1092, ISSN 1876-6102, <https://doi.org/10.1016/j.egypro.2017.07.434>.
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- S. Coccolo, D. Mauree, E. Naboni, **J. Kaempf** and J.-L. Scartezzini. *On the impact of the wind speed on the outdoor human comfort: a sensitivity analysis*, in Energy Procedia, vol. 122, p. 481-486, 2017, <http://dx.doi.org/10.1016/j.egypro.2017.07.297>.
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- C. Basurto, **J. Kämpf**, J.-L. Scartezzini, *Multi-criteria analysis for the integrated performance assessment of complex fenestration systems*, Building Research and Information, Pages 1-17, <http://dx.doi.org/10.1080/09613218.2016.1235911>.
- 2016** S. Coccolo, **J. Kämpf**, J.-L. Scartezzini, D. Pearlmutter, *Outdoor human comfort and thermal stress: A comprehensive review on models and standards*, Urban Climate, Volume 18, 2016, Pages 33-57, <http://dx.doi.org/10.1016/j.uclim.2016.08.004>.
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- A. Borisuit, **J. Kämpf**, M. Münch, A. Thanachareonkit, J.-L. Scartezzini, *Monitoring and rendering of visual and photo-biological properties of daylight-redirecting systems*, Solar Energy, Volume 129, May 2016, Pages 297-309, ISSN 0038-092X, <http://dx.doi.org/10.1016/j.solener.2015.12.052>.
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- 2013** D. Perez, **J. Kämpf**, and J.-L. Scartezzini, *Urban area energy flow microsimulation for planning support: a calibration and verification study*. International Journal on Advances in Systems and Measurements, issn 1942-261x, vol. 6, no. 3 & 4, year 2013, 260:271, http://www.ariajournals.org/systems_and_measurements/

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- J. Kämpf**, M. Wetter, and D. Robinson. *A comparison of global optimisation algorithms with standard benchmark functions and real-world applications using EnergyPlus*. Journal of Building Performance Simulation, 3(2):103-120, 2010. <http://dx.doi.org/10.1080/19401490903494597>.
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- 2007** J. Page, J.-L. Scartezzini, **J. Kämpf**, and N. Morel. *On-site performance of electrochromic glazings coupled to an anidolic daylighting system*. Solar Energy, 81(9):1166-1179, 2007. <http://dx.doi.org/10.1016/j.solener.2007.01.011>.
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- 2019** J. Vázquez-Canteli, **J. Kämpf**, G. Henze and Z. Nagy, *CityLearn v1.0: An OpenAI Gym Environment for Demand Response with Deep Reinforcement Learning*, in: Proceedings of the 6th ACM International Conference on Systems for Energy-Efficient Buildings, Cities, and Transportation, New-York, USA, pages 356-357, ACM, 2019. <http://dx.doi.org/10.1145/3360322.3360998>.
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- R. Oliveira, **J. Kämpf**, R. Vicente, R. Almeida and A. Figueiredo, *CO2 experimental measurements towards the development of a predictive framework using user actions in smart buildings*, in: Journal of Physics: Conference Series, IOP Publishing Ltd, 2019. <http://dx.doi.org/10.1088/1742-6596/1343/1/012061>.
- Y. Wu, **J. Kämpf** and J. -L. Scartezzini, *Daylight regulated by automated external Venetian blinds based on HDR sky luminance mapping in winter*, in: Journal of Physics: Conference Series, IOP Publishing Ltd, 2019. <http://dx.doi.org/10.1088/1742-6596/1343/1/012158>.
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- C. Chatzipoulka, R. Compagnon, and **J. Kämpf**. *An image-based method to evaluate solar and daylight potential in urban areas*. In Proceedings of the Symposium on Simulation for Architecture and Urban Design (SIMAUD '18). Society for Computer Simulation International, San Diego, CA, USA, Article 35, 2018. <http://dx.doi.org/10.22360/simaud.2018.simaud.035>.
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